CHAPTER 5

History of the Use of Hallucinogens in Psychiatric Treatment

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Introduction

This chapter covers the history of psychotherapeutic treatment methods that use some hallucinogens (and entactogens) to facilitate psychotherapy. Because of their ability to intensify and restructure inner experience, the psychoactive substances typically used today as adjuncts to psychotherapy include lysergic acid diethylamide (LSD), psilocybin, and 3,4-methylenedioxymethamphetamine (MDMA). Investigation and development of these procedures in psychiatry began about 100 years ago. However, if one looks further back into the past, it is obvious that psychedelic agents have been used for religious and healing purposes by shamans and other healers for more than 10,000 years (Furst, 1972; Schultes & Hofmann, 1979).

After a period of broad and fruitful research (cf. Passie, 1997; Grof, 1980a, 1980b; Leuner, 1962), the use of hallucinogens as aids to psychotherapy was neglected and all but forgotten from about 1970 to 2000, due to unfortunate historical circumstances. Nevertheless, prior to that hiatus, the more than 700 scientific papers published on the topic clearly demonstrate how actively physicians and psychologists were involved in investigating the therapeutic potential of psychedelics during the 1950s and 1960s (Passie, 1997).

Associated with the social restlessness of the 1960s was an increasing prevalence of uncontrolled use at the end of the decade—a phenomenon that developed independently from medical use. A statutory prohibition of these substances was first enacted in 1966 in the United States. and Europe. Although the laws allowed for exceptional exemptions, the de facto result was a nearly complete cessation of the previously prolific study of their effectiveness (Grinspoon & Bakalar, 1979; U.S. Food and Drug Administration, 1975).

Central to the widespread use of hallucinogens in the 1960s was the group that formed around Harvard psychologists Timothy Leary, Richard Alpert, and Ralph Metzner, who initially discussed the evocation and implications of the psychedelic experience in a scientific manner. Starting in 1964, however, they began promoting these substances as agents for the "illumination of the human mind," and as a means to become free of the constraints of the Western worldview and its attitude toward self-awareness (Dass, Metzner, & Bravo, 2010).

This promotion of hallucinogens for "consciousness expansion" coincided with, and contributed to, the mass protest movement among young people in Western industrialized countries against existing cultural norms and values, which, according to them, were outdated, and against racial and other injustices. In the context of this this international movement, the use of psychedelics became a mass phenomenon (Lee & Shain, 1985; Stevens, 1987), intensifying social turbulence, especially in the United States (Keniston, 1968/1969). Complications that can arise from taking psychedelics under poorly controlled conditions were reported, and played a major role in how the media portrayed hallucinogens. These included traumatic internal experiences or "bad trips," often resembling severe panic attacks, "flashback" phenomena, triggering of latent psychosis in vulnerable individuals, and more.

Press coverage became even more negative with a single-case report of possible chromosome damage, published in 1967 by Cohen, Marinello, and Back—a report that did not stand up to meticulous scientific examination (see review by Grof, 1980a). Nevertheless, the resulting bad publicity instigated a sudden retreat of scientists and therapists active in the field, who feared being caught in the undertow of negative headlines. As psychiatrist Oscar Janiger, who was involved in LSD psychotherapy in Los Angeles described it, "The whole goddamn climate changed. Suddenly you were conspirators out to destroy people."

Two basic approaches to the use of psychedelics have been developed over time, and these have been described as *psycholytic* (soul-loosening) and *psychedelic* (mind-manifesting). I focus in this chapter on these methods and also discusses the historical context of their development. I also deal with two modified approaches: *psychedelytic* therapy, and *MDMA-assisted psychotherapy*. Some rather unconventional approaches are also addressed.

The Psychotomimetic Paradigm

The first phase of clinical research with psychedelics was marked by the *psychotomimetic* paradigm. Encouraged by the Swiss pharmaceutical firm Sandoz, most researchers until the 1950s thought that the primary effect of LSD was to induce states that resemble an acute psychosis. It was presumed that LSD could be used to give psychiatrists firsthand experiences of their psychotic patients. In the mid-1950s, psychiatrists began to suspect metabolic aberrations as the cause of psychosis, especially after the discovery of the neurotransmitter serotonin, with which LSD primarily interacts (Green, 2008). In the following two decades, a large number of biochemical, physiological, and psychological experiments were carried out on animals and humans involving LSD. The number of scientific publications on LSD in the years from 1943 to 1970 approached 10,000, causing LSD to be described as "the most researched pharmacological substance ever" (Hintzen & Passie, 2010).

In the mid-1950s it became apparent that the argument that LSD produces a reasonable model psychosis had some major shortcomings. The consensus was stated well by the prominent Swiss psychiatrist Manfred Bleuler (1958), who observed the following:

1. Schizophrenia cannot be characterized by the presence of any particular isolated symptom. Only a combination of symptoms, including thought disorder, ego disturbance, depersonalization, and hallucinations, progressing gradually to render the individual incapable of controlling his or her life, is characteristic of schizophrenia.
2. The symptoms induced by LSD differ from the usual syndrome characterizing schizophrenia. For example, visual phenomena are predominant with LSD, whereas auditory hallucinations are predominant in schizophrenia.
3. The alienating and unharmonious, the *Uneinfühlbare,* typical for schizophrenia, is absent with LSD.
4. Schizophrenics can easily discriminate between chemically induced (toxic) phenomena and naturally occurring psychotic phenomena.

These insights marked the end of the era of LSD as a psychotomimetic. However, some more recent studies have tried to elu-

cidate neurophysiological pathways of psychotic states (e.g., Gouzoulis-Mayfrank et al., 1999; Riba et al., 2006; Vollenweider & Geyer, 2001).

A Prehistory of the Use of Drugs in Psychotherapy

The first pharmacological attempts to influence an individual's state of consciousness in Western psychotherapy date back to the 19th century, when ether, chloroform, and hashish were used to deepen hypnotic states (Schrenck-Notzing, 1891). Beginning in the 1920s, physicians used subnarcotic doses of barbiturates to decrease cortical control in an attempt to make suppressed psychological material accessible. This was referred to as *narcoanalysis* (Horsley, 1943).

Since the 1920s, a variety of human experiments with hallucinogens, especially mescaline, have been conducted. Interestingly, most researchers concluded that the experiences do not reflect the psychodynamics of their experimental subjects (Passie, 1993/1994). However, they remained interesting for other reasons, and the Italian psychoanalyst Baroni (1931) was the first to use mescaline in a psychotherapeutic setting.

A Short History of Psycholytic Therapy

In the first clinical study of LSD, Stoll (1947) noted that most subjects experienced strong personal emotions and memories during their sessions. Busch and Johnson (1950) were the first to report on the use of LSD in psychotherapy. They were followed by Chandler and Hartmann (1950) and British psychiatrist Ronald Sandison, who found intensification of affect and abreactive memory activation leading to significant improvements in neurotic patients after a single dose of LSD (Sandison, Spencer, & Whitlaw, 1954).

Around 1950, Sandoz issued a prospectus, stating that small doses of their new product Delysid (the brand name for what they also called LSD-25) caused transitory disturbances of affect, hallucinations, depersonalization, reliving of repressed memories, and mild neurovegetative symptoms. The indications mentioned for its use were "analytical psychotherapy, to elicit release of repressed material and provide mental relaxation, particularly in anxiety states and obsessional neuroses." Hence, the clinicians who first explored the therapeutic use of LSD had a psychoanalytic orientation and attempted to integrate Delysid into their practice of psychoanalytic psychotherapy.

Also in the early 1950s, German psychiatrist Hanscarl Leuner (1984) developed guided affective imagery, a daydream technique used in psychotherapy. Concluding that small doses of hallucinogens may intensify imagery and induce regression and catharsis, Leuner (1959) began to use low-dose LSD with his psychotherapy patients. German psychoanalyst Walter Frederking (1953/1954, 1955) was another early proponent of LSD as an adjunct to psychotherapy.

Psychoanalysis as a theoretical orientation was prominent in psychiatry in the 1950s, and the psycholytic method was grounded in what at the time were widely accepted analytic concepts. With psycholytic therapy, serial individual treatment sessions (5–20) with low doses of LSD or psilocybin were conducted at weekly intervals to produce a dream-like experience. These sessions were embedded in a conventional psychotherapeutic process.

The general approach was designated "psycholytic therapy," or "psycholysis," by Sandison at the First European Symposium for Psychotherapy under LSD-25 in 1960 (Barolin, 1960). Although the original use and development of psycholytic therapy occurred among psychoanalytic therapists mainly in Europe, some work along these lines was also conducted in the United States and in South America (e.g., Fontana, 1965). At one point, the psycholytic method was used at 18 academic centers in Europe, and by more than a hundred outpatient therapists (cf. Caldwell, 1968; Malleson, 1971). During the 1960s, due to a continuous process of refinement, psycholytic therapists arrived at what might be considered today as a fully developed method (cf. Abramson, 1967; Grof, 1980b; Leuner, 1981). Between 1953 and 1968, more than 7,000 patients were treated with psycholytic therapy, and at that time there were approximately 400 scientific publications on the approach (Passie, 1997).

At the end of the 1960s, research and therapeutic work with hallucinogens came to a halt in both Europe and the United States. This was a consequence of legislation banning these substances, initiated in the United States but adopted in most of Europe as well. Among the few exceptions were therapists in what was then Czechoslovakia. Several clinics there were active through the 1970s, and about 40 LSD therapists worked with outpatients. In 1968, the United Kingdom saw 40 LSD therapists protesting against the prohibition of their method (Sandison et al., 1954), arguing that hallucinogens were safe and effective when used in a therapeutic context. One survey in the United Kingdom showed that the risks are no greater with LSD than with conventional psychotherapy (Malleson, 1971). This confirmed the findings of an earlier similar survey of Cohen (1960) in the United States.

Hanscarl Leuner in Germany and Jan Bastiaans (1917–1997) in the Netherlands were the only two university chairs in psychiatry who still held licenses for the use of LSD in psychotherapy. Both focused on treatment-resistant patients. Leuner treated neurotic inpatients. Bastiaans, who had worked with narcoanalysis since 1946, reported in 1961 that LSD was significantly more effective than standard therapy among the treatment-resistant survivors of concentration camps and prisoners of World War II with whom he worked (cf. Snelders, 1998). In LSD sessions, while patients lay on a couch in his office, Bastiaans (1974, 1983) took the position of a father figure who gave his patients the warmth and understanding they required. However, this made more traditional psychoanalytic colleagues, who worked with more emotional detachment, somewhat wary. After Leuner and Bastiaans retired in the late 1980s, no university researchers were left.

In 1986, the Swiss Physicians Society for Psycholytic Therapy (SÄPT) was started by physicians interested in the therapeutic use of LSD (Baumann, 1986). Five members were able to get a special permit to use LSD and MDMA in their offices, which lasted until 1993, when an accident unrelated to their work with LSD and MDMA led to the revocation of their permits. Nevertheless, members of this group were able to gain considerable experience, and created a new kind of group work with psychedelics (Gasser, 1996; Styk, 1994; Widmer, 1997).

Principles of Psycholytic Therapy

The first psycholytic psychotherapists were all psychoanalytically trained and used conventional treatment settings. Preparation for the administration of LSD was done in the course of long-term psychotherapy, so that a good relationship and some understanding of patients' problems could be achieved prior to use of hallucinogens. Patients were informed that LSD is just an aid to therapy, that the LSD experience is not the curative process itself, as much of the integration still has to be done in subsequent psychotherapy sessions and everyday life.

While under the influence of LSD, the patient lies on a couch in a darkened room. The therapist stays with the patient for the session. The dosage is individually adjusted so that the patient remains aware of the therapeutic character of the situation. The patient is asked to surrender without reservation to the impressions, emotions, and visions that appear. Under the influence of LSD, all conventional psychotherapeutc mechanisms are amplified—the successive reliving of traumatic experiences from childhood, associated with emotional abreaction, rational integration, and resulting insights. The therapeutic relationship is usually greatly intensified, and analysis of transference is an essential part of psycholytic treatment. The occasional remarks of patients are recorded with a tape recorder or in writing, and are given to them afterwards to prepare a summary report of their experience. The LSD experiences are subsequently interpreted and worked through in drug-free sessions, usually within a psychodynamic framework. The typical number of sessions is 5–50 (usually 10–20), incorporated in the course of 100–200 conventional psychotherapy sessions. However, some researchers have treated patients with less time and fewer sessions. Others found that a few LSD sessions conducted at the right time can be very effective.

It became obvious early on that the conventional treatment setting was not appro-

priate for this type of therapeutic work. Psycholytic therapy requires a "more humane approach, genuine support, and personal involvement" (Grof, 1980b, p. 31). Obviously, a more direct approach was necessary, along with occasional physical support (albeit with caveats—e.g., Leuner warned against touching a patient below the shoulders), no immediate interpretations, some psychodramatic involvement in the patient's experience, and a higher tolerance for acting-out behavior. This shift from a detached attitude to more direct participation on the part of the therapist has led to criticism by many psychiatric professionals.

The use of LSD places greater demands on the therapist than does conventional psychotherapy. The patient's increased regression and anxiety, as well as potentially stronger transference and countertransference reactions, can be challenging for the therapist.

Modifications of Psycholytic Therapy

Psycholytic therapy underwent a number of modifications during its active years. Some European therapists experimented with shorter-acting psilocybin derivatives such as CZ-74 (4-hydroxy-*N,N*-diethyltryptamine, also known as 4-HO-DET; Baer, 1967; Shulgin & Shulgin, 2014), which has a duration of 4–6 hours and is phenomenologically similar to LSD; CEY-19 (phosphoryloxy-*N,N*-diethyltryptamine, also known as 4-PO-DET or *ethocybin*), which has a duration of 2–4 hours and is also similar to LSD, and the mescaline derivative 2-CD (2,5-dimethoxy-4-methylphenethylamine; Schlichting, 1989). Therapists in the United States experimented with the short-acting dipropyltrytamine (DPT) in psycholytic therapy (Soskin, 1975; Soskin, Grof, & Richards, 1973), as well as in psychedelic therapy (Richards, Rhead, DiLeo, Yensen, & Kurland, 1977).

In the 1960s, Ling and Buckman (1963), Leuner (1967), and others promoted the additional administration of methylphenidate to increase emotional responses and abreaction. Methylamphetamine was also tried, but its use was found to be detrimental. For the most part, stimulants were found not to add much of value to psycholytic therapy, and their supplemental use was later abandoned.

Other modifications of psycholytic therapy included group sessions, attempted by Leuner (1971) and Sandison and colleagues (1954), who worked with multiple inpatients in individual treatment rooms, with an attending nurse and a visiting physician as sitters, to minimize costs. With this technique, up to five patients could be treated at the same time (Figure 5.1). After the acute effects of LSD diminish, the patients met in a group room to discuss their experiences and insights with the physician and nurse. Leuner also developed what he called the "interval inpatient treatment," in which patients were treated as outpatients, but with brief overnight stays in the clinic, limited to 2 days, for psycholytic sessions.

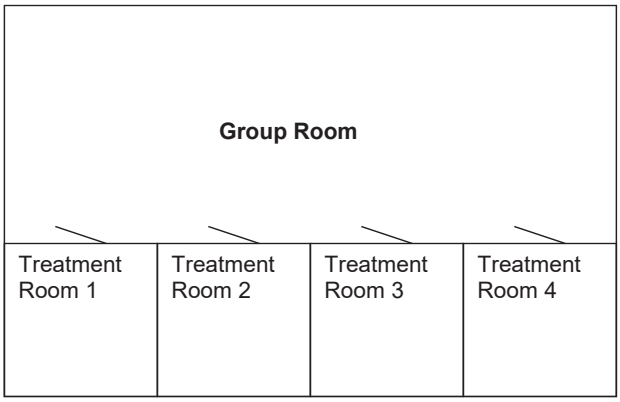


FIGURE 5.1. Typical clinical facility for individual sessions as used by Leuner et al. (1983) and Sandison et al. (1954).

Especially noteworthy was the work of Czech psychiatrist Milan Hausner (1929–2000), who began his work with LSD in 1954 and continued until 1980. Hausner's approach was developed in Sadska hospital near Prague, where many inpatients and outpatients were administered LSD for as many as 60 sessions (Hausner & Dolezal, 1963; Hausner & Segal, 2009). The therapy protocol was variable. Typically, patients were treated during a hospital stay for 5–7 weeks in conjunction with group therapy, sociotherapy, occupational therapy, sports, psychodrama, and autogenic training, plus follow-up care after discharge from hospital. In many cases, patients spent 3–6 months on the ward, during which time they had weekly LSD sessions, followed by art therapy and group discussions of the patients' experiences (Hausner & Segal, 2009). The clinic also worked with patients who stayed for weekend LSD sessions every 3–4 weeks.

On the weekends, groups of five to six patients underwent LSD therapy in individual rooms, in the presence of a specially trained nurse. Patients were divided into two groups, one of which underwent LSD therapy while the other served as "co-guides." This was reversed the following day. The "weekend clinic" approach had several advantages. Patients could live in their homes and keep their jobs, and they could immediately integrate experiences in everyday life, which is important for therapeutic success. According to Hausner, no adverse effects were encountered with this approach.

Assessing the Effectiveness of Psycholytic Therapy

During the years when psycholytic therapy was developed and researched (1950s and 1960s), the methods of scientific research on psychotherapy were rudimentary. Most psycholytic therapists reported improvement in about two-thirds of their usually difficult-to-treat neurotic patients (Mascher, 1967). Assessed from a current perspective, their studies and findings may have been compromised by methodological biases (cf. Pletscher & Ladewig, 1994). However, some psychedelic therapists were more rigorous in their methodology (e.g., Kurland, Savage, Pahnke, Grof, & Olsson, 1971; Ludwig, Levine, & Stark, 1970). The assessment of the effectiveness of psycholytic therapy is further complicated by the fact that in Europe, psycholytic treatment was primarily used for patients resistant to conventional psychotherapy, which may have biased treatment samples toward persons with more severe psychopathology. Moreover, several researchers used these patients as their own controls (e.g., Geert-Jorgensen, 1968; Leuner, 1994).

In only a few studies was psycholytic therapy performed with at least a few controlled variables (Denson & Sydiaha, 1970; Robinson, Davis, Sack, & Morrissey, 1963; Soskin 1973; Soskin et al., 1973; Vourlekis, Faillace, & Szara, 1967). Their results yielded little evidence for the superiority of psycholytic therapy over conventional psychotherapy. Nevertheless, double-blind studies performed by Vourlekis and colleagues (1967) and Soskin and colleagues (1973) indicate, congruent with many uncontrolled studies, that specific actions of psychedelics may enhance and deepen the psychotherapeutic process.

A Short History of Psychedelic Therapy

Another major approach to the therapeutic use of hallucinogens, one that differs significantly from the psycholytic method, was developed in North America and termed the "psychedelic method." The development of this procedure can be attributed to the rather disparate work of several researchers.

Beginning around 1950, prompted by the observation that many alcoholics remain abstinent after the traumatic experience of an hallucinatory and anxiety-provoking delirium tremens episode, Hoffer and Osmond set out to produce delirium tremens using high doses of LSD, with the objective of effecting abstinence. Their results suggested that, in contrast to their initial hypothesis, the apparent lasting therapeutic effects of LSD were associated with expanded self-awareness and religious experiences (Hoffer, 1967).

In 1955, anesthesiologist Eric Kast conducted a comparative study of analgesics among terminal cancer patients, in which

LSD was used as an active placebo. To his surprise, he found that patients who received LSD reported a decrease in pain and a more relaxed attitude toward death, along with deepened self- and situational insight (Kast, 1963, 1966).

In addition to these reports of the therapeutic use of hallucinogens by clinicians, ethnographic reports suggested that ingestion of certain hallucinogenic plants in the context of an indigenous religious ritual (e.g., peyote, Brazilian ayahuasca religion) led to dramatic, positive personality changes in sociopathic and alcohol-dependent individuals (cf. Andritzky, 1989; La Barre, 1989; MacRae, 1992).

Informed by their early experiments, Hoffer and Osmond (1966) developed and started using the *psychedelic* treatment technique, which made induction of mystical–religious experiences the focus of therapeutic action (Blewett & Chwelos, 1959). This approach uses a quasi-religious preparation of the patient, affecting both set and setting: high doses, specific surroundings, and music to evoke insights and mystical experiences. These investigators emphasized the apparent transformative power of mystical states of consciousness. The LSD experience "forced [patients] to reconsider their patterns of behavior by an enhanced self-understanding" (Smith, 1958).

Duncan Blewett, the supervising psychologist of Osmond's treatment team in Canada, concluded that patients experienced themselves and the world

> through immediate intuition or insight in a way differing from ordinary sense perception or the use of logical reasoning. . . . In such an experience there appears always to be a feeling of some direct contact with the infinite and the eternal, a feeling of being at one with the world's Author and all His Works, a complete abandonment of the self and all its motives. Also frequently noted are tremendous infusions of love, feelings of remarkably enhanced understanding, and an awareness of very great beauty all about one. There is a feeling of being outside the bounds of time, space, and the self. (Blewett, 1958/2016, p. 240)

Because the idea that a "constructive" experience beyond the boundaries of the "ego" could help to overcome illness and personality problems marked a significant and seemingly unscientific paradigm change, Blewett was harshly criticized by some colleagues at the time.

One individual who contributed significantly to interest in the hallucinogens in the 1950s and 1960s, although he was neither a physician nor a psychologist, was Alfred M. Hubbard, who was influential among the early investigators of LSD. He played a significant role in the evolution of the psychedelic method. He developed and promulgated a technique to induce a transcendental or "psychedelic experience" in a large percentage of participants. Osmond and his associates began to learn from Hubbard, and implemented his insights and techniques into their own approach to psychedelic therapy (Blewett & Chwelos, 1959).

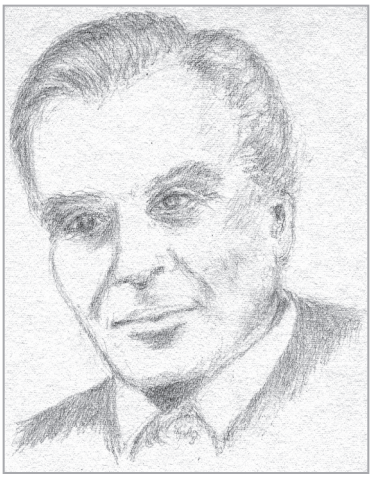
By the early 1960s, LSD treatment programs were operational in four medical facilities in Canada (Dyck, 2008). The researchers from Saskatchewan began treating their patients mainly in small group settings, with three or four patients at a time. With their approach, Hoffer and Osmond reckoned their program was "faster, cheaper, and twice as effective as any other program" (Hoffer & Osmond, 1966, p. 36). Based on, and guiding, their extensive experience in Saskatchewan, their colleagues, psychologist Duncan Blewett and psychiatrist Nick Chwelos, wrote the *Handbook for the Therapeutic Use of Lysergic Acid Diethylamide-25*. This was the first psychedelic treatment manual. The group also published the results of several studies (cf. synoptic review in Krebs & Johansen, 2012).

Early findings suggested that LSD might be one of the most innovative and successful approaches to the treatment of alcoholism, and the methods of these Canadian researchers were adopted especially by researchers in the United States. Eventually, the psychedelic treatment model came to be used, and refined, at about 10 facilities in the United States. This line of research continued through the 1960s, culminating in controlled studies at the Maryland Psychiatric Research Center in Catonsville, Maryland (e.g., Grof, 1975; Pahnke, Kurland, Unger, Savage, & Grof, 1970; Kurland, 1985; Yensen & Dryer, 1993/1994). Although the results of those studies were favorable and

encouraging, with very few exceptions, the use of the psychedelic method remained limited to North America, while the psycholytic approach remained dominant in Europe.

Beginning around the year 2000, clinical studies of hallucinogens resumed in the United States. Psychedelic therapy underwent a resurgence, encouraged by the findings of projects conducted at a handful of academic centers, especially work involving research with psilocybin in normal volunteers at Johns Hopkins University. In a number of carefully designed and conducted clinical studies, researchers at Johns Hopkins have shown that mystical-type experiences can be reliably induced, with lasting psychological improvement, and without serious adverse effects (Griffiths et al., 2016; Griffiths, Richards, McCann, & Jesse, 2008). More recently, a pilot study to treat alcoholism with psilocybin-assisted psychedelic therapy was successfully completed at New York University (Bogenschutz et al., 2015), and psychedelic therapy has also been shown to be an effective means to facilitate smoking cessation (Johnson, Garcia-Romeu, Cosimano, & Griffiths, 2014).

One indication for psychedelic therapy that has been discussed since the 1950s is the use of hallucinogens to improve quality of life among people who are terminally ill. This theme appeared in the writings of author Aldous Huxley, who was introduced to mescaline by Humphrey Osmond, and found the experience very useful. In his later novel *Island,* the inhabitants use the *Moksha medicine* to induce a mystical vision that had the effects of freeing them from the fear of death and enabling them to live more fully. Through his own experiments with psychedelics, Huxley concluded that the LSD experience could make dying easier, and in 1958 Huxley wrote a letter to Osmond arguing for the administration of LSD to dying patients. He took the idea seriously enough that in 1963, before he died, Huxley asked his wife Laura to inject him with LSD during his last hours.



Aldous Huxley

In the same year, anesthesiologist Eric Kast set out to examine the potential analgesic propertifes of LSD in people with severe pain. In a study comparing morphine and meperidine, with LSD used as an active placebo, Kast (1963) found that patients coped better with pain and existential issues after they had received LSD. When he asked his patients about the effects of LSD, they often reported profound experiences, which had changed their perspectives on life and death (Kast, 1966). Inspired by Huxley and Kast, Sidney Cohen (1965) conducted further trials along these lines.

In 1965, a member of the treatment team of the psychedelic research group at the Maryland Psychiatric Research Center (MPRC) developed cancer that was associated with marked psychological distress. It was suggested that her distress might be effectively treated with a psychedelic session. The outcome was sufficiently encouraging that the team decided to further explore this treatment, administering LSD and DPT to more than 100 MPRC patients (Grof & Halifax, 1978; Kurland, 1985; Kurland, Grof, Pahnke, & Goodman, 1973; Pahnke, 1969; Pahnke, Kurland, Goodman, & Richards, 1969; Richards et al., 1977). The shorter-acting DPT was found to be especially useful, as LSD could be exhausting, especially with this population of patients (Grof, Goodman, Richards, & Kurland, 1973). Following a lengthy hiatus in clinical studies of hallucinogens, Grob and colleagues (2011) published a pilot study in which they successfully treated terminal cancer patients with psychotherapy and psilocybin. Gasser and colleagues (2014; Gasser, Kirchner, & Passie, 2016), Griffiths and colleagues

(2016), and Ross and colleagues (2016) subsequently replicated these favorable results in larger trials.

In addition, the results of a small pilot study suggested that psilocybin might be an effective treatment for depression (Carhart-Harris et al., 2016). Beginning in 2018, the psychedelic treatment of depression became the focus of Phase 2 clinical trials in Europe and North America.

Principles of Psychedelic Therapy

Psychedelic therapy is a highly specialized form of brief, intensive psychotherapy, facilitated by the administration of hallucinogens. It has three different phases: preparation, the psychedelic session, and working through.

Preparation involves conversations in which patient and therapist discuss the patient's difficulties in living (past and present) and his or her goals, aspirations, frustrations, and relationship to religion. The patient is seen from three to five times a week for 2–4 weeks. It can be helpful to incorporate family members into the preparatory phase.

During the *psychedelic session,* the patient is given a high dose of LSD (250–450 micrograms [μg]) or a similar substance. The hallucinogen causes a loosening of defenses and leads to reliving, abreaction, and insight. An integral part of a successful session is the dissolution of the ego and a mystical experience of oneness, accompanied by feelings of sacredness and joy.

Following the psychedelic session is the phase of *working through,* in which new insights and discoveries are sorted out. Old maladaptive defenses are shed or discarded, and new ways of experiencing, looking at, and reacting to events are explored. Without this posthallucinogen reinforcement, the LSD experience may gradually fade away, becoming just a memory.

In psychedelic therapy, ideally, the patient has been supported by the therapist's en-

TABLE 5.1. Traditional Approaches to the Psychotherapeutic Use of Hallucinogens (Passie, 1997)

Psycholytic therapy	Psychedelic therapy
• Low doses of LSD (50–150 μg), psilocybin (7–15 mg), CZ 74 (10–20 mg), MDMA, etc., producing symbolic dream images, regressions, and transference phenomena.	• High doses LSD (250–1,500 μg) leading to so-called cosmic–mystical experiences often marked by oneness and ecstatic joy.
• Activation and deepening of the psychoanalytic process.	• Modern transpersonal approaches used to explain structure and effects of experiences.
• Numerous sessions required (5–30).	• The goal is one to three "overwhelming" experiences with a mystical connotation.
• Analytic discussion of experienced material in individual and group sessions (focus on ego psychology, transference, and defense mechanisms).	• Suggestive quasi-religious preparation and use of specific surroundings and music. Usually not a very detailed discussion of the experience.
• Reality comparison and attempt to adapt experience to everyday life.	• Adaption to reality not the main purpose. Enhancing the meaning of the "psychedelic" experience.
• Goal: Cure through restructure of personality via a maturational process and loosening of infantile parental attachments.	• Goal: Symptomatic cure involving behavior change.
• Classical indications for psychotherapy: neuroses, psychosomatic disorders, psychopaths, sexual neuroses, borderline cases. Neither alcoholism nor psychoses.	• Alcoholism, psychoneuroses, terminal cancer patients.

couragement, permissiveness, and warmth, while learning to communicate his or her innermost feelings with another fellow human. A positive, trusting therapeutic relationship is required to lead the patient though the often-difficult experiences that may emerge. Patients are given headphones and eye shades, and are instructed to surrender to the flow of the experience. Music helps to structure the experience, furthering catharsis, and enabling the patient to "let go." A specific music playlist for psychedelic therapy was developed by Bonny and Pahnke (1972).

During the psychedelic session, the patient is encouraged to express negative feelings if they occur. Resistance is identified as such but not interpreted. If the patient is avoiding a particular problem, he or she is told that he or she is avoiding it. Though feelings are identified and accepted, no transference interpretations are attempted. Therapists are chosen for their capacity to be warm and giving without endangering their own egos. In a well-prepared patient with good ego resources, a session may almost run itself, while others might need varying degrees of support and help. In the late afternoon, it can be helpful for the patient to be taken outdoors to experience nature's beauty.

An example of a psychedelic mystical experience may be helpful here. According to one study participant,

> Sound ceased and I seemed to be floating in a great, very, very still void or hemisphere. Peace and contentment seemed to flow through my entire body. It is impossible to describe the overpowering peace, contentment, and being part of goodness itself that I felt. My body felt as if it were dissolving and actually becoming a part of the goodness and peace that was all around me. Words can't describe this. A tremendous feeling of exaltation came over me. I felt rapture and ecstasy. . . . It was overwhelming! There are no words to describe my feelings then. I seemed to be transported to the top of the highest mountains. All was still and quiet. A sense of cleanliness and purity swept over me. I felt humble and insignificant. I was completely awed! . . . I felt as though I had been reborn. (in Unger, 1974, p. 213)

It is important that patients remain in psychotherapy and have appropriate social support for the postsession integration of the psychedelic experience. As results have shown, when patients are "left alone" after such experiences, the effects of treatment may disappear rapidly.

It would be a misconception to view psychedelic therapy as making psychotherapy "easier." The procedures not only require special training and competence for the therapist, but also conducting this type of therapy can be fatiguing and place the therapist under a considerable strain. It can be an arduous and stressful procedure for patient and therapist alike (Unger, 1974, p. 214).

The systematic and rigorous evaluation of psychedelic therapy has been difficult. Results differ widely as a function of how the drug is administered, and how the therapist interacts with the volunteer. Smart and Storm (1964), for example, were concerned about the different protocols for a psychedelic session, and questioned the favorable results of psychedelic therapy reported among alcoholics. They conducted what they described as a "strictly controlled" evaluation to address this issue, attempting to eliminate positive, supportive behavior on the part of therapists. In their study, alcoholics received no predrug (preparatory) treatment and were not informed ahead of time about the drug's effects. Participants were injected with 800 μg of LSD (a large dose) or 20 mg of ephedrine as placebo, and were then "attached to the bed by a light but strong belt for security" (Smart, Storm, Baker, & Solursh, 1967). They were then "interviewed" by a doctor and nurse for 3 hours. The results of this study were (predictably) unfavorable, and the critical comments made by MacLean and Wilby (1967) explain why this was so.

The problem, as Smart and associates (1967) viewed it, is that the results of psychedelic therapy are so dependent on set and setting that an objective observer might wonder whether the outcome is not primarily a function of suggestion, of the therapist's encouragement of a positive attitude toward the session. There have been significant improvements in research methodology since the 1960s, and more methodologically sound studies in recent years have yielded consistently good results, which have been replicated recently with careful attention

to both clinical and experimental protocols (e.g., Bogenschutz et al., 2015; Griffiths, Richards, McCann, & Jesse, 2006; Griffiths et al., 2016; Grob et al., 2011; Ross et al., 2016).

Psychedelytic Therapy

It was not an easy task for therapists to merge such very different approaches as psychedelic and psycholytic therapy. The Atlantic Ocean also came between the therapists using these different approaches, with distinctly European and North American allegiances to one or the other. As leading LSD psychotherapist Grof has pointed out, the difference is not in the nature of the experience but in the qualitative incidence of certain elements in the sessions characteristic of each approach. Many patients in psychedelic therapy, for example, experience childhood memories and other material of biographical significance—such phenomena are not unique to psycholytic treatment. On the other hand, many psycholytic therapists have observed experiences of a mystical nature among their patients but have tended to view them as resistance against painful psychodynamic issues.

Nevertheless, it appeared to many researchers that both methods could make significant contributions to individual outcomes, and that a merger of the two might be beneficial. A combination of the psycholytic and psychedelic approaches was first suggested by Alnaes (1965) and by Grof (1967). This "psychedelytic" approach integrates both the processing of psychodynamic material in low-dose, serial psycholytic session, and the intense and profoundly transformational experiences of high-dose psychedelic sessions (Yensen, 1994). An amalgam of psychedelic and psycholytic processes has been applied in several studies, with beneficial effects (Benz, 1989; Fontana, 1965; Gasser et al., 2014).

Contrary to popular belief, high-dose psychedelic sessions may be safer than low-dose sessions. With a high dose, a decreased ability to resist the effects of the drug is associated with a more complete surrender, along with more complete resolution and integration. On the other hand, psychedelic sessions may involve more potential problems during the acute effects of the drug, as psychic defenses collapse, reality testing and self-control are compromised, and an individual experiences large-scale emergence of unconscious emotions and feelings. In psycholytic therapy, a more gradual, successive uncovering of unconscious material is feasible. However, unwilling subjects might easily generate maladaptive psychic defenses and intense anxiety reactions, and emotional lability between sessions can result from closely spaced serial LSD sessions. An additional limitation of low-dose psycholytic therapy is that sometimes doses are insufficient to facilitate access to intense emotional material.

The SÄPT, founded in 1985 in Switzerland, received a special permit allowing its physician members to conduct psychotherapy with LSD and MDMA between 1988 and 1993. SÄPT therapists treated patients primarily in group settings and developed some specific therapeutic group techniques (Benz, 1989; Styk, 1994). Congruent with the psychedelytic approach, higher doses were used than in psycholytic therapy (e.g., 100–200 µg LSD), along with full dose MDMA. The setting allowed for individual experiences, as well as permissive group interaction, especially in later stages of the drug sessions. The use of music was alternated with periods of quiet. A similar treatment model has been developed by European underground therapists in the last 25 years (cf. Passie, 2012). It is possible that psychedelytic therapy, applied in group settings, might become the predominant approach in the future, as it both supports the therapeutic process through the interpersonal field and reduces professional time and thereby the cost of treatment.

Anaclitic Therapy

Anaclitic therapy was apparently developed and conducted by only two London psychiatrists, Joyce Martin and Pauline McCririck. They took advantage of the deep regression that can occur under the influence of a medium dose of LSD (100–200 µg), and gave their patients an element of direct satisfaction of infantile needs for physical affection

by providing close physical contact during the sessions. They sometimes held their patients, fed them warm milk, and caressed and held their clients' heads in their laps. The patients' subjective reports revealed authentic feelings of a symbiotic union with the mother image, with an experience of a "good breast" (Martin, 1957).

According to Grof (1980b), who has observed anaclitic sessions, these can be "extremely healing experiences." He theorizes that this kind of intensive care under the influence of LSD can "fill the vacuum caused by deprivation and frustration," providing what is sometimes referred to as a "corrective emotional experience" (Alexander & French, 1946). The anaclitic approach fueled a great controversy, both because of concern about a therapist touching a patient in such an intimate way, and because it is contradictory to tenets of conventional therapy, which focus instead on acceptance of and appropriate coping with early frustrations. Anaclitic therapy was never widely practiced, but elements have been used by Azima (1963), and by therapists of the SÄPT in group therapy sessions (Gasser, 1996; Widmer, 1997).

Hypnodelic Therapy

Ludwig and associates experimented with the use of hypnosis in conjunction with LSD (125–200 μg), in order to channel the unstructured aspects of the psychedelic state in a somewhat more structured therapeutic direction (Ludwig & Levine, 1965). They tested this in a controlled study designed to treat a group of opioid addicts, comparing hypnodelic therapy and treatment involving only LSD. Subjects were hypnotized within the first half-hour after LSD administration, before the drug began to take effect. In the hypnotic state, subjects were encouraged to examine and understand their current difficulties. They were helped to work through problems, to overcome resistances, and to relive relevant childhood memories, and therapists attempted to facilitate catharsis and abreaction. After 3 hours, they were brought out of the hypnotic state, having been given a posthypnotic suggestion to remember what occurred during the session, and to continue working on their problems. Persons in the LSD group (without hypnosis) were reported to have had good outcomes, but less positive than was the case for the group with the additional hypnotic induction (Levine & Ludwig, 1967). Hypnodelic therapy was never widely used.

The Psychosynthesis of Salvador Roquet

Salvador Roquet (1920–1995) was a Mexican physician who studied a number of psychotropic drugs used by indigenous peoples, including psychedelics, in therapy. He worked at the Albert Schweitzer Institute in Mexico City, an institution conducting psychotherapy outcome research. During the early 1970s, Roquet and his associates developed a system of psychotherapy which he called *psychosynthesis* (Roquet, Favreau, Ocana, & Velasco, 1975; Roquet & Favreu, 1981; Villoldo, 1977). In addition to conventional psychoanalytically oriented therapy, this system included group therapy sessions using psychedelics. These sessions lasted for about 20 hours, and were held in a large room, equipped with large posters and music, as well as slide and film projectors. The visual material, which was intended to induce sensory overload, encompassed a wide variety of situations in life, ranging from some that were funny or beautiful to scenes that were often cruel or disturbing (e.g., concentration camps). Slides were presented to stimulate a broad spectrum of emotions and cathartic reactions.

In groups with 15–30 participants and a few professional psychotherapists, 12 sessions were held per year, per patient. An integral part of psychosynthesis was the administration of different psychoactive drugs, including LSD, ketamine, 3,4-methylene-dioxy-amphetamine (MDA), mescaline, *Rivea corymbosa, Datura* species, *Salvia divinorum,* and ayahuasca, in a specific order. This was another way to confront patients with a broad spectrum of experiences and emotions. Among the people treated by Roquet were patients with diagnoses of neurosis and personality disorders, but some people with addictions were also treated, as well as some asymptomatic, healthy individuals. In 1974, Mexican authorities raided the Institute. Roquet was arrested, charged with drug

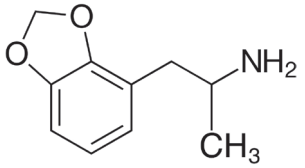
trafficking and endangering his patients, and imprisoned. He was eventually acquitted, but his work with psychedelic therapy was prohibited, and Roquet settled in California.

According to Roquet, between 1968 and 1974, he worked with 388 patients using his method. Roquet and Favreau (1981) attempted to evaluate the therapeutic results of psychosynthesis; Roquet maintained that 85% of his patients improved.

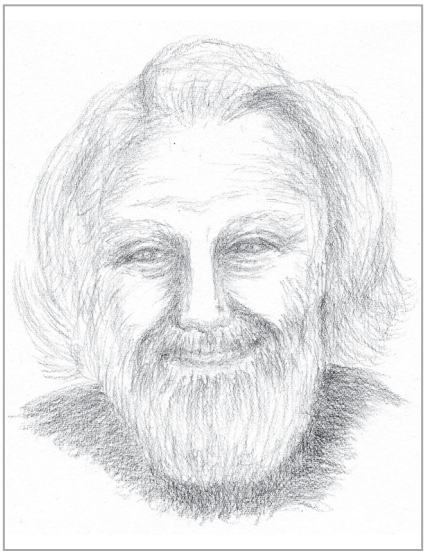
MDMA-Assisted Psychotherapy

Mescaline and some of its derivatives have been studied for their hallucinogenic activity since the beginning of the 20th century (Passie, 1993/1994). It was Californian pharmacologist Gordon A. Alles (1959) who first described the specific psychopharmacological effects of MDA, which was found to induce a state of intensified emotion with less hallucinatory activity and cognitive alteration than mescaline. For this reason, in the early 1960s MDA was tested by Chilean psychiatrist Claudio Naranjo as an agent that might facilitate psychotherapy (Naranjo, 1973; Naranjo, Shulgin, & Sargent, 1967).

In a continuing search for a "psychotherapeutic drug," Naranjo and his associate, American chemist Alexander T. Shulgin, studied derivatives of the essential oils of nutmeg. In 1962, Shulgin synthesized 3-methoxy-4,5-methylenedioxyamphetamine (MMDA), which appeared promising in part because it had fewer hallucinogenic effects (Shulgin, Sargent, & Naranjo, 1973). Nevertheless, MDA—but not MMDA—became the drug of choice for many underground psychotherapists from the mid-1960s onward (e.g., Stolaroff, 2004). MDA was also used in studies of drug-assisted psychotherapy (Turek, Soskin, & Kurland, 1974; Yensen et al., 1976).



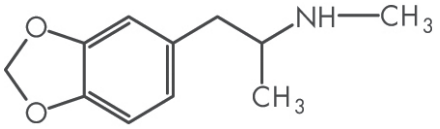
MDA (3,4-methylenedioxyamphetamine)



Alexander Shulgin

In 1977, Shulgin introduced psychologist and Jungian psychotherapist Leo Zeff to MDMA, which looked like a better and less toxic alternative to MDA (Benzenhöfer & Passie, 2010). Zeff introduced MDMA to a number of other therapists, and it became the new drug of choice for those seeking a legal approach to psychedelic-assisted psychotherapy. While MDMA was still legal,

Ann Shulgin



MDMA (3,4-methylenedioxymethamphetamine)

Zeff and a number of other therapists working with it developed recommendations for specific settings, precautions, guidelines, and indications (Passie, 2018).

Despite the apparent utility of MDMA and the protests of physicians and psychologists who believed it was beneficial to their patients, in 1985, MDMA was classified as a Schedule 1 drug. An expert committee of the World Health Organization (WHO; 1985) recommended international prohibition of MDMA as an adjunct to psychotherapy. The committee was not, however, opposed to the study of MDMA, and its report noted that

> the expert Committee held extensive discussions concerning the reported therapeutic usefulness of MDMA. [It was] felt that the studies lacked the appropriate methodological design. There was, however, sufficient interest expressed to recommend that investigations be encouraged to follow up these preliminary findings. The Expert Committee urged countries to use the provisions of article 7 of the Convention on Psychotropic Substances to facilitate research on this interesting substance. (WHO, 1985)

In the United States, in 1986, Rick Doblin, who had an interest in hallucinogens and a doctorate in public policy, and was eager to promote further research with MDMA, founded the Multidisciplinary Association for Psychedelic Studies (MAPS). Doblin and MAPS promoted research into MDMA for more than 30 years, and their efforts led to the first clinical studies in 1992 (Grob, Poland, Chang, & Ernst, 1996; Liester, Grob, Bravo, & Walsh, 1992). Several laboratories have laid groundwork for the use of MDMA with clinical and pharmacological research.

It became apparent in early exploratory studies of MDMA in psychotherapy that the drug might be especially useful for people with PTSD (Passie, 2018a), and this is the diagnosis on which MAPS has since focused attention. Since 2000, several Phase II studies, funded by MAPS, have been completed as part of the organization's long-term plan for approval and marketing of MDMA for therapy with people who have treatment-resistant PTSD (Mithoefer et al., 2011, 2018, 2019; Ot'alora G et al., 2018). MDMA as an adjunct to psychotherapy was also given breakthrough drug designation from the FDA, and FDA-approved Phase III clinical trials got underway in 2018 and 2019.

Principles of MDMA-Assisted Therapy for Posttraumatic Stress Disorder

MAPS developed a treatment manual and training curriculum to educate therapists in performing MDMA-assisted therapy. The procedures have been standardized, and the treatment is conducted by a female–male team in individual settings. Patients are given eyeshades, low-volume music is played, and patients are instructed to focus attention inward. The nondirective attitude of the therapists is somewhat similar to psychedelic therapy, as their role is to further, but not interfere with, patients' inner process. Therapists are, however, expected to gently focus patients' attention on their traumatic experiences, if necessary.

Slightly different mechanisms may be involved in the healing with MDMA than appears to be the case with the classic hallucinogens (Passie, 2012). The alteration of psychological functioning is not as extreme as with the hallucinogens, and it has been shown that MDMA significantly reduces the activity of the brain's fear networks (Gamma et al., 2000; Gouzoulis-Mayfrank et al., 1999). This may enable patients to confront and work through painful and dissociated memories or other aspects of traumatic experience, and to find new insights and adaptations. Because of its effects on the brain's fear network, MDMA might be conceptualized as a "trust booster." This is important insofar as the basic feeling of safety and trust tends to be adversely affected in patients with posttraumatic stress disorder (PTSD; Williamson, Porges, Lamb, & Porges, 2014). An important aspect of the mechanism of MDMA could be a disruption of the reconsolidation of fear memory. In

a rodent model of fear learning, Hake and colleagues (2019, p. 343) obtained results suggesting that MDMA "could augment psychotherapy by modifying fear memories during reconsolidation without necessarily enhancing their extinction." If this underlies therapeutic change in humans, it could account for the persistent changes observed in patients with PTSD in clinical trials (e.g., Mithoefer et al., 2013).

While MDMA was used at first mainly in individual sessions (as was LSD), it quickly became obvious that it can easily be used in group settings. MDMA has advantages for group settings because of its capacity to reduce interpersonal distrust, without interfering with sensory perception or cognition. Two approaches to group therapy were established. One involved instructing the participants to focus on themselves and to engage in inward-directed reflection as the major purpose of the session. The other approach (Adamson & Metzner, 1988; Naranjo, 1989) views interpersonal contact during the session as a major part of the therapeutic process. A similar approach has been used by the SÄPT therapists (Gasser, 1996; Passie, 2007). Because MDMA also seems to facilitate communication, especially in close relationships, MDMA has also been used in couple therapy (Greer & Tolbert, 1990).

Group Treatment with Psychedelics

Treatment sessions with classic hallucinogens have the disadvantage of being very time-intensive for the therapist(s). Hence, since the early days of research with hallucinogen-assisted psychotherapy, there has been interest in the possibility of conducting sessions with several patients simultaneously. At first, some therapists simply tried to treat patients under the influence of LSD in conventional group settings, in which patients were expected to interact with one another verbally. These attempts were abandoned when it became obvious that the nature of the psychedelic experience was incompatible with conventional group process (e.g., Tenenbaum, 1961). Such proponents of psycholytic therapy as Leuner, Hausner, and Sandison eventually concluded that it would be feasible to have group sessions during the preparation and integration phases, but when a patient was under the drug's effects, an individual session with an attending nurse and a physician who drops by the medication session from time to time was preferable. Nevertheless, some investigators have reported successful group work with low doses of LSD (e.g., Derbolowski, 1967/1968; Rojo Sierra, 1960), in a more regressive setting.

The psychedelic therapists who worked with Osmond and Blewett in treating alcoholics in Saskatchewan developed an approach in which patients took LSD in groups of three or four, with one therapist present. Drawing in part on the manual by Blewett and Chewlos (1959), patients were asked to recline in a darkened room, focus their attention inward, and stay by themselves listening to music for most of the session, with occasional contact by the therapist. A European proponent of a somewhat similar approach was Alnaes (1965).

A new phase of group treatments began in the early 1960s, using a more permissive setting that encourages regression. Patients were allowed to act out emotions and experience transference reactions during the session (e.g., Fontana, 1965; Spencer, 1963, 1964). Arendsen-Hein (1963), Derbolowski (1967/1968), Hausner and Dolezal (1963), and Tenenbaum (1961) also used a similar group approach successfully. Spencer (1963) experimented with a special kind of permissive group therapy for treatment-resistant "neurotic" patients. On Sandison's LSD ward at Powick Hospital (United Kingdom), patients were encouraged to be noisy, tip over tables and bedsteads, and smash dummies and toys that had been provided. Clay and a sand trays were available for modeling, and patients were also allowed to wander around the hospital grounds. In a variation on this theme, Eisner (1964, 1967) allowed patients to "abreact" by destroying cartons or other "inexpensive or useless objects" (1967, p. 546).

If one looks back into the history of psychedelics, group approaches were rather unusual. It seems that a main factor for the comeback of the group setting was the appearance of entactogens such as MDMA. Some initial group work was done when MDMA was still legal (Passie, 2018a). A

more systematic use of groups was associated with the work of the SÄPT (Styk, 1994). These therapists learned that group settings can be very productive for facilitating psychotherapy, especially with MDMA (Benz, 1989; Gasser, 1996). They came to believe that it was advantageous if participants under MDMA and others under LSD were mixed because in contrast to LSD, MDMA seemed to "stabilize the groups." In addition to the economic advantages, other benefits of using these substances in group settings include (1) greater feelings of safety and trust; (2) making public one's own inconsistencies and traumas; (3) revealing transferences and defense mechanisms; (4) space for experiencing oneself and others in a new way; and (5) a feeling of belonging to a larger framework. It was also found that fewer transference problems emerged in a group when more than one therapist was present (Passie, 2012). It should be mentioned that a number of underground therapists have developed similar approaches to group therapy (Marsden, 2001; Passie, 2007).

The SÄPT and some other therapists have developed a useful group approach over the last two decades. After patients have been treated with 10–20 conventional (drug-free) individual psychotherapy sessions, they are invited to take part in psycholytic group sessions. These take place in a separate facility on weekends. Patients meet on Friday evening and become accustomed to the rooms and the other patients through some simple rituals. These are framed to focus on patients' actual problems. The dose is typically in the range of 100–150 mg MDMA or 75–200 μg LSD. Patients are asked to lie down on mattresses and to wear headphones and eyeshades. A music playlist is available for the session, and periods of music alternate with periods of quiet. Two to three therapists of both sexes are usually available to look after eight to 15 patients (more details in Benz, 1989; Passie, 2012).

During the first 3–4 hours of the session, people are expected to focus on themselves and not engage in communication with other group members. Therapists may be recruited to talk with a patient whenever it is necessary. Therapeutic interventions include talking and other supportive behaviors. After 6 or 7 hours, the therapists may do a "round," talking to each patient separately to check on his or her state, focusing on his or her problems, and perhaps giving further advice. At that time, a small meal is offered to patients, and after this "closing ritual," the group is left with an opportunity for communication with each other. This is thought to be therapeutically effective because by then, people were open and free of anxiety, and that emotional state might lead to new experiences in communication. After breakfast the next morning, a so-called "integration circle" is held. At this time, every participant shares a summary of personal experiences and insights from the session. Therapists and other participants provide support, joining in discussing and interpreting the experience. The therapists focus on possible lessons that can be transferred to everyday life.

For the reasons described earlier, and for economic reasons, group approaches may become common options for the future. This treatment approach has been described as safe and effective (Gasser, 1996). The groups offer much interpersonal stimulation, and facilitate trust and new interpersonal experiences, in addition to the individual psycholytic process, which does not appear to be disturbed by the group setting.

Recent experience with these methods suggests that the group approach is beneficial. The new options produced by the specific effects of the *entactogens* (MDMA, MDE, etc.) seem to the effectiveness may allow for cost-effective treatment of neurotic disorders, specific addictions, personality disorders, eating disorders, obsessive–compulsive disorders, and PTSD.

Education of Therapists

There has never been a standardized program to train therapists. Every group has its own way, usually just educating a few research therapists. It is unknown how the psychotherapists who were using LSD therapy with outpatients have been trained. Leuner at Göttingen University in Germany has worked on a curriculum to educate psycholytic thrapists, which includes sitting in the sessions facilitated by an experienced therapist, and after several sessions as an ob-

server, the roles are changed, so that the experienced therapist observes the new therapist. There are self-experiences with LSD or the like for the therapist, in addition to theoretical seminars, and participation in the clinical work on the ward, where the patients are taken care of between the drug sessions and non-drug psychotherapy sessions (Leuner, 1992). In an effort to establish MDMA-assisted psychotherapy as a treatment for PTSD, MAPS (2019) has established a training curriculum for their therapists, including online courses, one self-experience with MDMA, discussion of videotaped therapeutic MDMA sessions, and discussion of videotapes of MDMA sessions they facilitated themselves. More recently, SÄPT (2018) has outlined a comprehensive curriculum for the education of psycholytic therapists. A main requirement is to be licensed as a psychotherapist, psychiatrist, or psychologist. The curriculum includes 10 theoretical seminars, some self-experience with MDMA and LSD, and peer supervision groups, in which patients under treatment are discussed with other psycholytic therapists. More recently it has become necessary to educate therapists for conducting Phase II trials for psilocybin as a treatment for depression. The managers of these trials designed a short-term educational course for their research therapists, including online courses, a weekend workshop, and a self-experience with psilocybin (COMPASS Pathways, 2019). Phelps (2016) has provided a comprehensive description of the attributes and features of a therapist for psychedelic therapy.

In 2019, the International Society for Substance-Assisted Psychotherapy (ISSP) was incorporated, with the intention to systematize knowledge of these new treatments, discuss standards for patient selection, establish procedures for patient safety, and support development of treatment manuals and educational curricula, as well as procedures for certification and quality assurance (cf., *www.is-sp.org*).

It is obvious to every clinician experienced with the use of psychedelics that their use in psychotherapy involves some risks that should not be overlooked. Therefore, it is necessary to educate therapists very carefully, and in a systematic fashion, on theoretical as well as practical levels. More than three self-experiences of the effects of the psychedelics used are recommended.

A main danger from my perspective is that the educational processes might not be taken seriously and that given adequate time, complications (e.g., unusual or aggressive/self-destructive behaviors, traumatic bad trips) cannot be handled appropriately by insufficiently trained therapists, especially when it comes to LSD and psilocybin. Their effects cannot be empathically understood by a therapist without sufficient self-experience and education, and that could lead to serious complications that once again might halt the development of psychedelics as medicines.

Synopsis and Outlook

The distinction between the psycholytic and psychedelic approaches is likely not to persist. A number of therapists (e.g., Grof, 1967, 1975) have tried carefully and successfully to combine advantages of both approaches in some form of the psychedelytic approach. Furthermore, it seems probable that in large part because of the constraints of medical economics, the group treatment approach will become more prevalent, if circumstances allow for it. However, group treatments may not be suitable for severely traumatized patients, and perhaps for those with more serious mental health problems.

Another relevant development has been the introduction of entactogenic substances that seem to be especially suitable for psychedelytic treatments, and may offer new options for treating a broader spectrum of conditions (Holland, 2001; Passie, Hartmann, Schneider, & Emrich, 2005). These new potential therapeutic directions stem in part from illegal psycholytic work carried out by a number of therapists worldwide, some of which have been incorporated to a certain extent into legal (research) contexts.

In addition to providing significant benefit to people with psychiatric/emotional disorders, it seems likely that many basically healthy people, albeit perhaps with some personal problems, will greatly benefit from psychedelic-assisted treatments that may provide them with new opportunities to learn about themselves. As Sidney Cohen (1967, p. 1), one of the prominent early LSD

researchers, puts it, LSD "does not construct character, educate the emotions, or improve intelligence. It is not a spiritual labor-saving device, salvation, instant wisdom, or a shortcut to maturity. However, it can be an opportunity to experience oneself and the world in a new way—and to learn from it."

From the perspective of nearly seven decades of clinical research, it appears that psychotherapeutic treatments assisted by hallucinogens and entactogens work in a general sense by activating endogenous self-healing mechanisms. Among the factors involved are the evocation and intensification of feelings, visual imagery, activation of repressed memories, and a broadening of perception, combined with new patterns of association and the generation of new perspectives. Another therapeutically important element in the higher-dose psychedelic therapy approach is the experience of ego dissolution of a mystical kind, which seems to be correlated with treatment success (Roseman, Nutt, & Carhart-Harris, 2018). Although hallucinogens and entactogens may be beneficial for a wide range of clinical disorders, people with an essentially healthy inner structure may be able to profit more because they can activate more self-healing resources. Psychiatric contraindications for psycholytic treatments include patients with weak ego structures, borderline personality disorders, and possibly some severe addictions. Contraindications for somatic diseases have to be considered individually and carefully.

If these methods were used on a broader scale, many patients might benefit, and what the founder of psychoanalysis, Sigmund Freud (1939/2001), stated might come true: "The future may teach us to exercise a direct influence, by means of particular chemical substances, on the amounts of energy and their distribution in the mental apparatus. It may be that there are other still undreamt-of possibilities of therapy."

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